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COOLANT PUMP CAVITATION SUPPRESSOR

ABSTRACT OF THE DISCLOSURE

An engine cooling system includes a centrifugal coolant pump and a cavitation suppressor in the system upstream of the pump inlet. The suppressor increases pressure in the pump inlet by a converging nozzle that accelerates a jet of coolant at the location of the static head and converting kinetic energy of the jet to increased pressure in a diffuser. In an exemplary embodiment, the suppressor is formed of simple components made from available materials and preferably welded into an assembly. A machined nozzle with a diffuser and head pipe made from available steel pipe comprise the main components of the exemplary cavitation suppressor.